

LEVEL II

Library



See PRO
[Signature]

AD A 0 75596

REPORT ON
TECHNICAL ADVISORY SERVICES,

Fiscal Year 1964

by

J.C. Rupe

DDC
OCT 24 1978
RECEIVED
A

DDC FILE COPY

DISTRIBUTION STATEMENT A
Approved for public release
Distribution Unlimited

U.S.A.
1964



79 10 24 031



DEPARTMENT OF THE ARMY
ARI FIELD UNIT, BENNING

U S ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
P O BOX 2086 FORT BENNING, GEORGIA 31905

PERI-1J

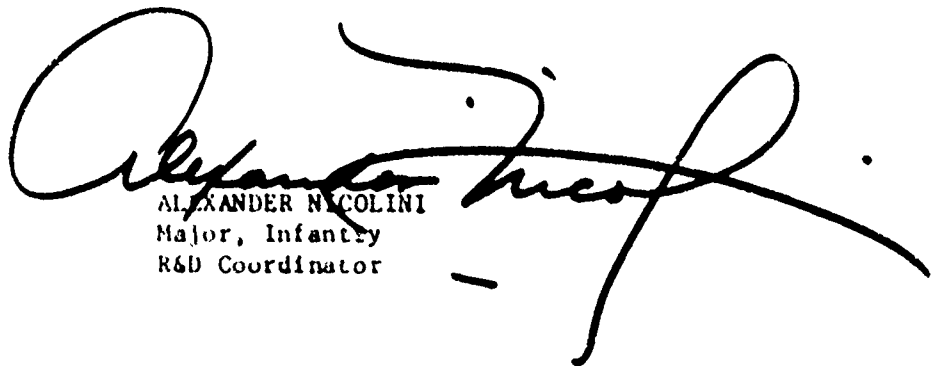
8 August 1979

SUBJECT: Shipment of Documents

Defense Documentation Center
Cameron Station
Alexandria, VA 22304
ATTN: Selection & Cataloging

The Documents in these shipments are approved for public release. The
distribution is unlimited.

FOR THE CHIEF:



ALEXANDER NICOLINI
Major, Infantry
R&D Coordinator

12 297

6
**REPORT ON
TECHNICAL ADVISORY SERVICES,**

Fiscal Year 1964

by
10 J.C. Rupe

Accession Number	
NTIS Avail	<input checked="" type="checkbox"/>
DDC TABS	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist.	Avail and/or special
A	

11
Oct 1964
The George Washington University
HUMAN RESOURCES RESEARCH OFFICE
operating under contract with
THE DEPARTMENT OF THE ARMY

173 200

The contents of this publication do not necessarily
represent the official opinion or policy of the
Department of the Army.

Published
October 1964
by
The George Washington University
HUMAN RESOURCES RESEARCH OFFICE
300 North Washington Street
Alexandria, Virginia 22314

INTRODUCTION

The HumRRO annual report of Technical Advisory Services (TAS) is published to provide the reader with information about the scope, variety, significance, and extent of the services and to serve HumRRO and appropriate Army agencies as a basis for future program planning and budgeting.

TAS is an information-providing activity usually initiated in response to a consumer request occurring under either of the following conditions:

- (1) If a reliable basis for providing the information exists within the body of relevant knowledge.
- (2) If only trend information exists, but the time available to either the responding research group or the potential user does not permit initiation of research.

TAS information is provided to the requester by oral report, memorandum, or Consulting Report, depending upon the anticipated breadth of interest and/or the amount of effort expended.

Assistance given in the implementation of HumRRO recommendations from a specific research effort comes under (1) above. It has been reported as TAS in the Tables that follow, even though it was started under a research Task while that Task was active. Services based on a Task are frequently given while it is still active. Sometimes experience gained during the research is immediately relevant to current operational problems. Often research by-products are also found extremely useful when applied to current problems. For example, job performance tests, prepared to test the efficacy of experimental training, have been found more generally useful. Of course, completed Tasks may continue to serve as a basis for providing TAS when needed.

TAS is also given in areas not related to a specific Task. Such TAS may fall under either condition (1) or condition (2) above. It is based upon the competence of HumRRO professional personnel. This competence may be in a special area and limited to specific individuals, or it may be more general, gained as a result of the training and experience required to achieve professional status. Many of the activities reported here are consultations of this nature.

Technical Advisory Services for Fiscal Year 1964

In the Office of the Director, TAS is almost continuous. There are frequent visitors from the other United States military services and the Allied military, seeking specific information. Many requests are received each month for publications, for research findings in specific areas related to the HumRRO mission, and for professional assistance over a broad spectrum.

The Director of HumRRO maintains a representative at Headquarters, United States Continental Army Command (USCONARC). This representative and his assistant provided liaison on HumRRO matters and consultation on training problems and performed special projects. The following are representative of the TAS activities performed at Headquarters, USCONARC during FY 1964:

- (1) Statistical analysis of a comparison between six- and eight-week basic combat training programs.
- (2) Preparation of guidance on the conduct of tests of the effectiveness of Army training programs.
- (3) Consultation with the Airborne Department of the Quartermaster School on Parachute Rigger training.
- (4) Development of training objectives for training cooks.
- (5) Preparation of suggested revisions to a DA pamphlet on programed instruction based on reviews made by all elements of HumRRO.
- (6) Review of Army MOS Subject Schedules 5-120, "Pioneer and Construction Helper"; 10-546, "Laundry, Bath, and Impregnation Specialist," MOS 546.1; 6-153, "Field Artillery Surveyor," MOS 153.0; and 5-626, "Construction Machine Operator."

One major TAS activity began during this period, after the issuance of the "Report on Recruit Training" by the then Undersecretary of the Army, Stephen Ailes, on 26 December 1963. As a consequence of the decision to implement the recommendations of that report, HumRRO was requested by Headquarters, USCONARC, to assist in preparing plans, documents, and programs. The Training Center Human Research Unit (TCHRU) was called upon for major support because of the relevance of Tasks TRANSITION, RIFLEMAN, and NCO. However, much past and current research by other research groups was also relevant, and personnel from these other groups and the Director's Office were also involved.

From the beginning of February until the end of March, 44 professional man-days had been expended on this effort. As noted in Table 3, Drs. Hood, Ward, Caylor, and Bialek of TCHRU were involved in the early planning and outlining of the attack upon the problem. Beginning 23 March, Dr. Hood, TCHRU, Dr. MacCaslin, Training Methods Division, Mr. Warnick and Mr. Cook, Armor Human Research Unit, and Mr. Hayes, Director's Office, spent 202 man-days in close cooperation with Army Training Center (ATC) experts at Fort Jackson, S.C. They assisted the USCONARC Trainer Preparation Project staff in developing detailed course objectives, programs of instruction, and evaluation techniques for officer and enlisted personnel scheduled for ATC trainer assignments. USCONARC administered these courses to the first class this summer, and Dr. Hood continues to assist in evaluation of the training, proposed modifications, and preparations for further applications.

Tabular presentations of the TAS activities of the HumRRO Divisions and Human Research Units follow, including estimates of the total amount of time expended.

**TABULAR PRESENTATION OF TECHNICAL ADVISORY SERVICES
BY HUMRRO DIVISIONS AND UNITS**

1 July 1963 - 30 June 1964

Tables 1-7

KEY TO ABBREVIATIONS IN TABLES

AIT	advanced individual training	POI	programs of instruction
AMC	Army Materiel Command	SDR	small device requirement
ARO	Army Research Office	SOP	standing operating procedures
ATC	Army Training Center	SPW	special purpose infantry weapon
ATP	Army training program	TC	training circular
ATT	Army training test	TM	technical manual
BCT	basic combat training	TR	Technical Report
BuPers, USN	Bureau of Personnel, U.S. Navy	USAADCEN	U.S. Army Air Defense Center, Fort Bliss, Tex.
BUT	basic unit training	USAADS	U.S. Army Air Defense School, Fort Bliss, Tex.
CBR	chemical, biological, and radiological	USAARMBD	U.S. Army Armor Board, Fort Knox, Ky.
CG	Commanding General	USAARMC	U.S. Army Armor Center, Fort Knox, Ky.
CONTRALANT	Commander, Training Command, U.S. Atlantic Fleet	USAARMS	U.S. Army Armor School, Fort Knox, Ky.
CONTRAPAC	Commander, Training Command, U.S. Pacific Fleet	USAAVNS	U.S. Army Aviation School, Fort Rucker, Ala.
CRD	Chief of Research and Development	USAAVNTBD	U.S. Army Aviation Test Board, Fort Rucker, Ala.
CRDL	Chemical Research and Development Laboratories, Edgewood, Md.	USABRI	U.S. Army Ballistics Research Labora- tories, Aberdeen Proving Ground, Md.
DA	Department of the Army	USACAGAR	U.S. Army Combat Developments Command, Armor Agency, Fort Knox, Ky.
DCSIT	Deputy Chief of Staff for Individual Training, USCONARC, Fort Monroe, Va.	USACDC	U.S. Army Combat Developments Command
DIA	Defense Intelligence Agency, U.S. Army Element	USACDCAVNA	U.S. Army Combat Developments Command, Aviation Agency, Fort Rucker, Ala.
DLI	Defense Language Institute	USACDCIA	U.S. Army Combat Developments Command, Infantry Agency, Fort Benning, Ga.
DLI, WCB	Defense Language Institute, West Coast Branch, Presidio of Monterey, Calif.	USACDCTA	U.S. Army Combat Developments Command, Transportation Agency, Fort Eustis, Va.
DOD	Department of Defense	USACGSC	U.S. Army Command and General Staff College, Fort Leavenworth, Kan.
DOI	Director of Instruction	USAIC	U.S. Army Infantry Center, Fort Benning, Ga.
ES	Exploratory Study	USAIS	U.S. Army Infantry School, Fort Benning, Ga.
ETST	engineer task service test	USAMRL	U.S. Army Medical Research Laboratory, Fort Knox, Ky.
HEL	Human Engineering Laboratories, Aberdeen Proving Ground, Md.	USAREUR	United States Army, Europe
HFORD	Human Factors and Operations Research Division	USASESCS	U.S. Army Southeastern Signal School, Fort Gordon, Ga.
IHRU	Infantry Human Research Unit, Fort Benning, Ga.	USATC	U.S. Army Training Center
LOH	light observation helicopter	USATSCH	U.S. Army Transportation School, Fort Eustis, Va.
MAAG	military assistance advisory group	USCONARC	U.S. Continental Army Command, Fort Monroe, Va.
MOS	military occupational specialty	USMA	United States Military Academy, West Point, N.Y.
NCO	noncommissioned officer		
NTDC	Naval Training Devices Center, Port Washington, N.Y.		
OCRD	Office of the Chief of Research and Development		
OCRD-CRD/R	Office of the Chief of Research and Development, Communications Electronics Division		
PI	programed instruction		

Table 1
Training Methods Division

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
REPAIR*	Participated in conference on feasibility of consolidating training for MOSs 311, 312, and 313 (Infantry, Armor, Artillery Communications Specialist Training).	Military Personnel Management, USCONARC	Jul 63	Dr. Vineberg	1
FORECAST**	Assisted U.S. Navy in the application of FORECAST principles and techniques to LORAN training through training of Navy technicians and preparation of course materials.	COMTRALANT, U.S. Navy	Jul 63- Jun 64	Dr. Shriver Mr. Trexler Mr. Lodge	196
FORECAST**	Consultation for the improvement of the FORECAST-LORAN course as presented by Navy at the Fleet Training Center, San Diego.	COMTRAPAC, U.S. Navy	Dec 63	Dr. Shriver Mr. Trexler	10
JOBTRAIN IV**	Continuing from FY 63. Development of a field test of a method for building training programs for first enlistment electronics maintenance MOSs that will permit substantial reduction in formal schooling without decrease in performance capabilities.	USASESCS	Jul- Aug 63	Mr. Gebhard Mr. Lodge	35
Not Task-Related	Prepared comments on "The Value of LOGEX as an Applicatory Exercise for Career Course Officer Students," paper by Col. T.E. Shaughnessy.	USCONARC	Aug 63	Dr. Fink	4
Not Task-Related	Conducted a briefing on programed instruction for visitors from Allied military.	Royal Canadian Air Force and Australian Army	Oct 63	Dr. Vineberg Dr. Seidel	2

(Continued)

*Completed Task.

**Task not in FY 64 Work Program.

Table 1 (Continued)
Training Methods Division

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Evaluated questionnaire data and planned reporting model for a maintenance manpower study.	USACDCTA	Oct 63-Jan 64	Dr. MacCaslin	3.5
Not Task-Related	Evaluated vehicle simulators. Attended USCONARC meeting to discuss trainer evaluation proposal.	DCSIT, USCONARC; USATSCH	Nov 63-Jun 64 (Continuing as ES)	Dr. McKnight Mr. Hunter Dr. deHaan	122
Not Task-Related	Prepared report on an analysis of classified problem dealing with man-packed jungle radios.	OCRD-CRD/R	Dec 63-Jan 64	Dr. Lyons Dr. Fink	19
Not Task-Related	Prepared interim Consulting Report, "Human Factors in Tactical Nuclear Combat"; classified project.	USACDC	Dec 63-Jun 64	Dr. Vineberg Mr. Montague Miss Bloxom	213
Not Task-Related	Reviewed draft DA pamphlet on PI.	ItFORD	Jan 64	Dr. Seidel	1
FORECAST**	Applied FORECAST principles to Navy MK-44 Torpedo System. Project proposal submitted in March; approved; work to begin FY 65.	BuPers, USN	Mar 64	Dr. Shriver	3
Not Task-Related	Developed procedures for handling "student load" problems.	DLI	May-Jun 64	Dr. Fink	16.5
Not Task-Related	Developed training program for cadre duty in ATCs.	USCONARC	Mar-May 64	Dr. MacCaslin	54
Not Task-Related	Reviewed MOS subject schedule, "Light and Heavy Vehicle Operator."	USCONARC	Jun 64	Dr. McKnight	1
Both Task-Related and Not Task-Related	Conducted consultations (15 of one-half day or less), human factors evaluations, and assistance on various training problems.	OCRD, USCONARC	Jul 63-Jun 64	Dr. Lyons et al.	10

**Task not in FY 64 Work Program.

Table 2
Armor Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
ARMOR-NITE X**	Continued work on field test of gunner proficiency in flash localization with an experimental reticle (conducted jointly by Armor Unit and Armor School). Conducted further data analysis, and submitted a report of the work.	USCONARC	Aug 63- Mar 64	Dr. Easley Dr. Willard Mr. Battrick	70
Not Task-Related	Assisted in preparation of an aptitude test battery to classify Armor School students by aptitude level for instruction in nuclear tactics and employment.	Command and Staff Dept., USAARMS	Mar 64	Dr. Baker	1
Not Task-Related (Miniaturization and Simulation)	Visited 17 installations in Seventh Army, to discuss problems involved in planning "a study of means to overcome existing limitations to training in USAREUR." Prepared report of problems and suggested solutions for use of military and research personnel concerned.	ARO, USAREUR	Feb 64	Dr. Baker	23
Not Task-Related	Provided representative from CRDL with technical advice on the design and conduct of studies of effects of CBR agents on performance.	CRDL	Jan 64	Mr. Cook	2

----- (Continued) -----

**Task not in FY 64 Work Program.

Table 2 (Continued)

Armor Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Administered an equipment serviceability criterion, which involved planning the conduct of the test, coordination, administering two forms of the test (truck and tank), and writing a Consulting Report on the results and effectiveness of the test.	U.S. Army Maintenance Bd., Fort Knox, Ky.	Sep-Oct 63	Dr. J.P. Smith Dr. Cannon Mr. Warnick Mr. Pickett	78
Not Task-Related	Reviewed proposed equipment test for the new battlefield day. Submitted summary of work in a letter report.	USAARMBD	Nov 63	Dr. Haggard	3
Not Task-Related	Provided assistance for representatives from Redstone Arsenal on the design of evaluation studies for helicopter missile sighting systems.	USACAGAR	Aug 63	Dr. Haggard	2
Not Task-Related	Conferred with representative from Frankford Arsenal on gunnery requirements in armor vehicles.	Frankford Arsenal, Philadelphia, Pa.	Jul-Aug 63	Dr. Haggard	4
Not Task-Related	Prepared and presented briefing on a proposed human factors program for the new main battle tank as a result of a meeting on the plan for a survey of human engineering changes for concepts proposed for the main battle tank.	USAARMBD	Aug-Nov 63	Dr. Haggard Mr. Osborn	21
Not Task-Related	Reviewed literature and current status of research on confinement and fatigue. Prepared and submitted a summary of the work as a Consulting Report.	USACAGAR	Aug 63-Jun 64 (Continuing as ES)	Dr. Cannon	120

Table 2 (Continued)
Armor Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Provided Dunlap and Associates with data on SS-10 and on human factors variables involved in missile simulation.	HEL	Mar 64	Dr. Haggard	3
Not Task-Related	Consulted on and reviewed a proposed manual of standard practice for human factors in vehicle fighting compartments.	HEL	Feb 64	Dr. Haggard Dr. E. Miller	3
Not Task-Related	Reviewed proposals resulting from USACAGAR's contract with the Ohio State University Research Foundation, and the contract research completed to date.	USACAGAR	Feb 64	Dr. Haggard	2
Not Task-Related	Reviewed the automotive mechanic training program at the USA Ordnance School. Studied the feasibility of administering the performance proficiency tests developed during Tank MOBILITY to recent Ordnance School graduates. Submitted report on the School program, with recommendations.	USCONARC	Feb 64	Dr. Willard Dr. Whitmore	12
Not Task-Related	Provided technical assistance in connection with the Trainer Preparation Course, a program being developed at Fort Jackson for officers and NCOs who are to make up cadre for BCT.	USCONARC	Mar- May 64	Mr. Warnick Mr. Cook	42

----- (Continued) -----

Table 2 (Continued)

Armor Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
RECON	Provided technical assistance on how to build and use the Armored Cavalry Trainer for the 1st Training Brigade, which has been using the terrain display system in teaching armored cavalry tactics during armor AIT.	1st Training Brigade, USATC, Armor	Jan- Jun 64	Dr. Baker Mr. Warnick	5
Not Task-Related	Gave technical advice on the implementation of the Miniature Armor Battlefield (MAB) for USAARMC personnel and representatives from NTDC.	USAARMC	Mar 64	Dr. Baker	2
Not Task-Related	Provided technical information on problems of procurement and operation pertaining to the MAB.	G3, Seventh Army	Sep 63	Dr. Baker	2
NCO	Met with personnel of the NCO Academy, Fort Knox, to review program difficulties encountered in implementing Tank NCO.		Aug 63	Mr. Warnick	1
Not Task-Related	Assisted in developing a test for use with the POI for the revised TM 38-750.	U.S. Army Maintenance Bd., Fort Knox, Ky.	Sep- Oct 63	Dr. Whitmore	15
Not Task-Related	Presented a briefing on extended operations at a conference held at USACAGAR with representatives from HEI, and USAMRL, after completing considerable exploratory work.	USACAGAR	Oct 63 (Continuing as future ES.)	Dr. Cannon	66
UNIT II*	Consulted on plans for implementing the Combat Decisions Game (CDG) for use by the Virginia National Guard.	Training Aide, Second United States Army	Jun 64	Dr. Baker Mr. Warnick	1

*Completed Task.

Table 2 (Continued)

Armor Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
UNIT II*	Provided technical advice for the implementation of MAB by evaluating an NTDC improvement in the basic design of the battlefield to make possible an expanded playing field.	NTDC	May 64	Dr. Willard Col. Davies Dr. Baker	3
Not Task-Related	Evaluated an attitude questionnaire to be administered to subordinates in the G1 office, Fort Knox.	G1, USAARMC	May 64	Dr. Cannon	0.5
Not Task-Related	Provided samples of forms or blanks to collect data on the training and experience of maintenance personnel for use in accounting for materiel deficiencies. Observed training sessions held for inspection teams.	U.S. Army Maintenance Bd., Fort Knox, Ky.	Jun 64	Dr. J.P. Smith	5
Not Task-Related	Conferred with representative from Picatinny Arsenal on the Proposed Project BRIGHT EYE.	Picatinny Arsenal, Dover, N.J.	Jun 64	Dr. Willard Col. Davies Dr. Haggard Mr. Cook	2
Not Task-Related	Collected relevant reference material and designed training method to develop a substitute for Seventh Army's Tank Crew Qualification Course.	ARO; USCONARC	Apr- Jun 64 (Continuing as ES)	Dr. Baker Mr. Warnick	26

-(Continued)-

*Completed Task.

Table 2 (Continued)

Armor Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Began development of an SOP for use by the Army Maintenance Bd. in developing equipment serviceability criteria. Began preparation of Consulting Report. Developed procedures for formulating a set of requirements and for testing their adequacy as a model in deriving performance requirements in Tanks VE-TRAIN III and TRAINTECH (1965 Work Program).		Jan-Jun 64 (Continuing)	Dr. Whitmore Mr. Pickett	84
Not Task-Related	Reviewed literature on the problem of an infrared night seeing device, and made inputs for the Phase I NITE OPS Study (USACDC); submitted a draft on probable effects on night operations of human factors problems that may arise through introduction of night vision devices, 1965-1970.	USACAGAR	Jan-May 64 (Continuing as ES)	Dr. Easley	15
Not Task-Related	Completed studies on Shillelagh gunnery problems: (a) tracking proficiency, end of AIT, and after further training; (b) interference caused by obacuration, jump, and flare effects. Completed data analysis; submitted classified preliminary report on tracking proficiency.	USCONARC; AMC, Weapons Command	Sep 63-Jun 64	Dr. Haggard	139

Table 2 (Continued)

Armor Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related (Continued)	Other Unit work on the Shillelagh included: (a) measuring the simulator tracking proficiency of gunners who will fire the ETST, so as to relate the scores later to ETST performance; (b) Armor Center discussions on AIT training requirement to meet Shillelagh demands; (c) an in-process review (at NTDC) of the Shillelagh weapon system trainer, including a Unit summary of the simulator studies; (d) a conference sponsored by the Weapons Command on modifications of the equipment testing program suggested by the Command as a result of the Unit's simulator studies.				

Table 3
Training Center Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Guest discussion leader for Leadership Seminar.	USMA	Sep 6	Maj. Gen. Sebree (Ret.)	4
NCO	Furnished 2,000 copies of the NCO Guide for the Potential Noncommissioned Officer, to be distributed to all men SP 4 and below.	11th Air Assault Division, Fort Benning, Ga.	1963		
NCO	Assisted in instituting NCO Preparation Course for the Boy Scouts of Monterey Peninsula, to be adopted nation-wide by the National Convention at Monterey (resulted in letter of appreciation from Chief Scout Executive, J.A. Brunton, Jr., to Sec. McNamara and from CRD, Lt. Gen. Dick).	Boy Scouts of Monterey Peninsula, Calif.	1963	Dr. Hood	Largely off-duty
NCO	Furnished information on the NCO Automated Program together with complete scripts to be used in Navy training.	Dept. of Navy	1963		2
RIFLEMAN IV	Participated in conference to develop training plans for the new MOS 112 and 114 and to discuss revised AIT program.	USCONARC	Jan 64	Dr. Ward	4
RIFLEMAN	Reviewed ATP critically for infantry BCT-AIT proposed by CG, Fort Gordon, that would reduce ATC training to 12 weeks and require deferred subjects to be taught in BUT.	USCONARC	Jan 64	Dr. Ward	2
RIFLEMAN	Assisted in preparation of scripts on the Role of the Light Weapons Infantryman, I-Rifle Squad in Defense; II-Rifle Squad in Attack, for making two motion picture films.	USAIS	Jan 64	Col. Fooks (Ret.)	16

Table 3 (Continued)
Training Center Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Participated at Fort Polk and Fort Monroe in AIT conference to consider the Ailes report and new AIT program and to assist HQ USCONARC in developing replies to the Ailes report.	HQ USCONARC	Feb 64	Dr. Ward Dr. Bialek Dr. Caylor Dr. Hood	44
TRANSITION	Participated with BCT Div. on revision of end-of-cycle BCT proficiency test, ATT 21-2. Consulted on revised ATP 21-114 and other recommendations of Ailes report.	USCONARC	Dec 63- Jun 64	Dr. Caylor Dr. Bardick Dr. Lyman	301
NCO	Implemented training program for ATC trainers.	USCONARC	Mar- Jun 64	Dr. Hood	64
Not Task-Related	Conducted high level leadership studies.	USACGSC	Mar- Jun 64	Maj. Gen. Sebree (Ret.)	32.5

Table 4
Infantry Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
RIFLEMAN BASICTRAIN*	Continued from FY 63. Conducted consultations concerning the revision of ATP 7-18, course for AIT for Light and Heavy Weapons Infantrymen.	USAIS	Jul 63	Dr. Ward Col. Kelly (Ret.) Col. Fooks (Ret.) (LHRU)	14
RIFLEMAN	Participated in meetings on tactical doctrine for offense and defense at level of platoon and rifle company and assisted in preparations for making training films on Rifle Squad in Defense and Rifle Squad in Attack.	USAIS	Sep-Nov 63	Mr. Powers Col. Kelly (Ret.)	1.5
RIFLEMAN V	Provided assistance and materials in the development of a land navigation training circular which in turn supported the development of MOS 111 and 112 Subject Schedules.	USAIS USCONARC	Sep 63-Jan 64	Mr. Powers	16.5
RIFLEMAN V	Conducted consultations in preparation for and review of land navigation training film TF 7-3360, "Land Navigation by Terrain Features," written into the 18-hour POI compiled by IHRU and Map Reading Committee.	USAIS	Sep-Feb 64	Mr. Powers	3
RIFLEMAN V	Evaluated a demonstration at Fort Gordon of the implementation of the advanced land navigation program.	USAIS	Nov 63	Mr. Powers	2
Not Task-Related	Consulted on the human factors considerations in the selection of top priority infantry material requirements.	USACDCIA	Aug 63	Mr. Powers	1.5

*Completed Task.

Table 4 (Continued)
Infantry Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Critically reviewed draft report, "Study to Conserve the Energy of the Infantryman," and attended conference for discussion of recommendations made.	USACDCIA	Aug-Sep 63	Col. Kelly (Ret.)	2
Not Task-Related	Prepared and delivered an invited address on motivation.	U.S. Naval Inst. of Ind. Rel.	Sep 63	Dr. Olmstead	5
Not Task-Related	Analyzed Leadership Analysis Questionnaire.	USACGSC	Sep-Oct 63	Dr. Jacobs	15
LEAD	Consulted on leadership training and PI research. Included seminar on PI for 30 to 40 people and discussed building a research capability at West Point for which Unit would provide continuing TAS. Later, leadership course material was furnished Unit for review and comments furnished West Point.	USMA	Jan-May 64	Dr. Lange Dr. Jacobs	28.5
Not Task-Related	Acted as adviser to Project LASER during demonstration by industrial firm. Critically reviewed classified document. Standby consultant for continued participation.	USACDCIA	Sep 63-Jan 64	Mr. Powers	1.5
Not Task-Related	Participated in Ad Hoc Committee assigned to study the problem of the organization proposed for infantry squad, platoon, company, battalion, and brigade using weapons and equipment available in FY 67.	CG USAIC	Jan-Apr 64	Col. Kelly (Ret.) Dr. Jacobs	15.5

----- (Continued) -----

41

Table 4 (Continued)

Infantry Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Reviewed and commented on draft manual "Tactical Employment of the M60 Machinegun" prepared by Weapons Dept., USAIS.	Weapons Dept., USAIS	Jan 64	Col. Kelly (Ret.)	2
Not Task-Related	Participated in conference to give guidance to USABRL, and information on rifle targets in combat, and to develop realistic, comprehensive tests of small arms including SPIW.	USACDCIA, USABRL	Mar 64	Col. Kelly (Ret.)	1.5
Not Task-Related	Consulted on the human factors implications in the use of night viewing and surveillance devices to be used in the preparation of an annex to a classified document.	USACDCIA	Mar-Apr 64	Dr. Jacobs Mr. Powers	5
Not Task-Related	Addressed Middle Management Workshop on "Organizational Climate and Motivation."	Civilian Personnel Sec., USAADCEN	Jun 64	Dr. Olmstead	1.5
Both Task-Related and Not Task-Related	Conducted consultations (18 of one day or less) concerning technical, tactical, statistical, and human factors problems; reviews of draft papers, rating systems, and plans of test; and so forth.	Agencies assisted were mainly those of USAIS but also included USACDCIA, 82nd Airborne Division, USAIC, Allied military, and industry.	Jul 63-Jun 64	All professional staff participated in one or more	12

Table 5
Air Defense Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Prepared Consulting Report on the determination of minimum math skills required for Basic Electronics.	USAADS	Jul 63	Dr. Cox Mr. Montgomery	42
LOCK-ON*	Reviewed, on formal request, training circulars and Army subject schedules concerned mainly with implementation of Task LOCK-ON principles in Hawk and Hercules systems.	USAADS	Jul 63- Feb 64	Dr. Melching	35
Not Task-Related	Reviewed, on formal request, specifications for task and skill analysis and training aids feasibility study.	USAADS	Aug 63	Dr. Rogers	4.5
MAINTRAIN**	Reviewed training aid - job aid proposal made by Republic Aviation Corp.	USAADS	Jan 64	Dr. Rogers	2
Not Task-Related	Determined extent to which a fire direction system operator may become confused when required to learn a second set of symbols with new or altered meanings; prepared Consulting Report.	USAADS	Dec 63- Mar 64	Dr. Bergum Mr. Burrell	202
VIGIL	Developed plan of test to implement TR 85 on HAWK equipment.	USAADS, USCONARC	Mar- Apr 64	Dr. Baldwin Mr. Wright	16
Not Task-Related	Addressed Middle Management Workshop on "Management Resources and Processes."	Civilian Personnel Sec., USAADCEN	Apr 64	Mr. Montgomery	3
Not Task-Related	Reviewed and commented on first and second drafts of TC 44-9, "Nike Hercules Fire Control Platoon Training Guide."	USAADS	May 64	Dr. Melching	2

----- (Continued) -----

*Completed Task.

**Task not in FY 64 Work Program.

Table 5 (Continued)

Air Defense Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Reviewed and commented on draft POI for Digital Fundamentals Training Course.	USAADS	May 64	Dr. Baldwin Dr. Rogers	1
Not Task-Related	Reviewed and commented on "Human Engineering Guide to Equipment Design."	Office of Naval Research	May 64	Dr. Baldwin Dr. Rogers Mr. Frederickson	2
Not Task-Related	Conducted study of backward chaining to determine effect of presenting instruction in reverse order for fixed procedural tasks.	DCSIT, USCONARC	May- Jun 64	Dr. Cox Mr. Boren Dr. Baldwin Dr. Melching	50

Table 6
Aviation Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Continued from FY 63. Further evaluated Aviation Training Device 2-B-12A in revised prototype form.	USAAVNTBD; NTDC	Jul-Sep 63	Dr. Prophet Mr. Boney Dr. Caro Maj. Haid	18
Not Task-Related	Conducted consultation evaluating a device, "Radiological Aerial Survey Simulation System" (RADASSIS), in the invention stage for use in the radiological survey course. Since basic problems in training are navigational, further development was not recommended.	DOI, USAAVNS	Sep 63	Dr. Boyles Mr. Boyd	1
Not Task-Related	Conducted feasibility study concerning development of selection procedures for the students entering the Mohawk (AV-1) Gunnery Training Course.	DOI, USAAVNS	Oct 63	Dr. Dawkins	28
Not Task-Related	Assisted in making a human factors evaluation of the Sikorsky S-64 Flying Crane at Fort Benning.	USAAVNTBD	Nov 63	Mr. Boyd Dr. Wright	2
Not Task-Related	Developed a questionnaire, rating scale, and statistical analysis of data, and provided psychometric ratings of LOH maintenance mechanics.	USAAVNTBD	Dec 63-Jan 64	Mr. Pauley Dr. Gray	26
Not Task-Related	Conducted consultation and instruction on the determination of behavioral objectives in connection with USCONARC directive for maintenance POIs involving 2200 hours of instruction.	Dept. of Maintenance, USAAVNS	Jan 64	Dr. Dawkins	1

--(Continued)--

Table 6 (Continued)
Aviation Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
LOWENTRY	Conducted consultation on problems of low altitude navigation. Included obtaining a presentation by R.E.F. Lewis, Canadian Defence Research Lab., covering relevant studies	Dept. of Tactics, USAAVNS	Feb 64	Maj. Haid Dr. Prophet Dr. Wright Dr. Gray Mr. Waller Mr. Pauley	4
LIFT* INTACT**	Conducted presentation on the subject of flight proficiency measurement to instructor personnel and students of the Standards Div. Dept. of Advanced Fixed Wing Training.	USAAVNS	Apr 64	Dr. Prophet	1
Not Task-Related	Participated in the preparation and review of the USAAVNTBD Plan of Test for the LOH and submitted a section outlining our specific activities proposed for the human factors evaluation of the LOH aircraft.	USAAVNTBD	Apr-Jun 64 (Continuing)	Dr. Wright Dr. Gray Mr. Boyd Mr. Pauley Mr. Jolley Mr. Waller 4 enlisted men	220
Not Task-Related	Participated in Army Aviation Human Factors Working Group.	Army Human Factors R&D Committee	Apr-Jun 64 (Continuing)	Dr. Wright Mr. Boyd Mr. Pauley	15
Not Task-Related	Prepared a Human Factors Evaluation Report on the F4-105C Integrated Flight System.	USAAVNTBD	Jun 64	Dr. Wright Mr. Waller	4.5
Not Task-Related	Assisted in Terrain Avoidance Display Evaluations.	USAAVNTBD	Jun 64 (Continuing)	Dr. Wright	1.5
Not Task-Related	Reviewed and submitted comments on a draft SDR for a Miniaturized Navigation Display for Army aviation.	USACDCAVNA	Jun 64	Dr. Wright	3.5

*Completed Task.

**Task not in FY 64 Work Program.

Table 6 (Continued)
Aviation Human Research Unit

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Assisted in evaluating Radar Altimeters.	USAAVNTBD	Jun 64	Dr. Wright Mr. Bryd	1.5
Both Task- and Not Task-Related	Conducted consultations (35 of one-half-day or less), reviewed technical papers, human factors evaluations, literature searches, and assisted with various aviation problems.	Mainly USAAVNS agencies, but also USACDCAVNA; USAAVNTBD; Allied military; industry; University scientists; etc.	Jul 63- Jun 64	All professional staff members participated in one or more.	13

Table 7
Language and Area Training Division

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
CONTACT	Discussed and explained interrogation procedure used in Task CONTACT.	DIA	Jul 63	Dr. Rocklyn	0.75
Not Task-Related	Made critical review of a programed text, "Safeguarding Classified Information."	Continental Air Command, Andrews AFB	Jul 63	Dr. Rocklyn	1.25
Not Task-Related	Reviewed experiment and advised on composition and content of report.	DLI	Jul 63	Dr. Rocklyn	2
Not Task-Related	Consulted on TAIOR program.	Schools Div., USCONARC	Jul 63	Dr. Rocklyn	2
CIVIC	Prepared illustrations of problems in cross-cultural effectiveness as resource aids to Army instructors making lesson plans in the Civic Action/Area training/MAAG areas.	U.S. Civil Affairs School, Fort Gordon, Ga.	Jul-Aug 63	Dr. Foster	20
Not Task-Related	Reviewed systems literature and correspondence; studied Personnel Data Forms.	DLI, WCB	Jul-Sep 63	Dr. Leedy	7
Not Task-Related	Reviewed status of statistical analyses of data obtained from DLI, WCB in connection with its study of the assessment of oral language proficiency of large numbers of personnel.	DLI, WCB	Jul-Oct 63	Dr. McCrary	8
Not Task-Related	Consulted with USACDC personnel to aid in their planning and conduct of a survey to determine maintenance man hours available per year as related to kind of unit and other factors.	USACDC	Oct 63	Dr. Brown (assisted Dr. MacCaulin of TMD)	0.5

Table 7 (Continued)
Language and Area Training Division

Task or Activity	Nature of TAS	Requesting Agency	Date	Advisory Personnel	Time Expended (days)
Not Task-Related	Prepared short course on "Morale and Its Measurement" for presentation to Vietnamese officers.		Oct 63	Dr. Brown	0.5
Not Task-Related	Provided assistance for data collection and analysis for DLI, WCB. Reviewed report supplied by DLI. Established a system for monitoring foreign language training.	DLI	Oct 63-Apr 64	Dr. Leedy Dr. Rocklyn	79
Not Task-Related	Consulted regarding the relationship between the Army Language Aptitude Test and foreign language performance. Included provision of data and plan of analysis.	DIA	Jan 64	Dr. Rocklyn	1
Not Task-Related	Specified language training requirements for U.S. personnel in Vietnam.	DLI	Apr-Jun 64	Dr. Fiks Dr. Hoeck	5
Not Task-Related	Assisted in devising a method for conducting a Dept. of Defense survey of foreign language training.	DLI	May-Jun 64	Dr. Leedy Dr. Hoeck	18
Not Task-Related	Planned improved procedures for resolving "student load" problems, i.e., maintaining up-to-date account of students, training, and course changes.	DLI	Jun 64	Dr. Leedy	16
Not Task-Related	Consulted on factors contributing to the effectiveness of units consisting of both U.S. and Korean personnel.	HQ Eighth Army, Korea	Apr-Jun 64 (Continuing)	Dr. McGarry	65

REPORT ON TECHNICAL ADVISORY 7/
SERVICES, FISCAL YEAR 1964

J. C. Rags